

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: HEDMAN et al.

Serial No.: 10/014,727

Filed: December 10, 2001

Title: METHOD OF KILLING ORGANISMS  
AND REMOVAL OF TOXINS IN  
ENCLOSURES

Art Unit: 3643

Examiner: Kurt C. Rowan

RESPONSE TO NOTICE OF NON-COMPLIANT APPEAL BRIEF

Mail Stop: Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notice of Non-Compliant Appeal Brief mailed December 18, 2008, please consider the following amendments and remarks.

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### AMENDMENTS

Please replace the "Status of Claims" Section on page 2 of the Appeal Brief filed on November 19, 2008, with the following rewritten Section.

#### **Status of Claims**

The Appellants are hereby appealing to the Board of Appeals the rejections of Claims 18-23, 26-30, 36-40 and 42-55, as stated in the Office Action mailed on June 20, 2008 (hereinafter the "Office Action"). Claims 1-17, 24-25, 31-35 and 41 were previously cancelled.

Please replace the "Summary of the Claimed Subject Matter" Section on pages 2-3 of the Appeal Brief filed on November 19, 2008, with the following rewritten Section.

**Summary of Claimed Subject Matter**

The present invention is directed toward a method of sanitizing an enclosed space. Specifically, as shown in Figure 2, and as recited in Claims 18, 20 and 26, an environmentally acceptable gas, such as air or nitrogen, is heated to a temperature lethal to undesirable organisms (36). See, e.g., p. 9, ll. 8-12. The heated gas is then directed into the enclosed space (e.g., through an ingress duct (38)) for a time sufficient to raise the temperature of the enclosed space to the lethal temperature. See, e.g., p. 6, ll. 10-17 and p. 9, ll. 8-12. The organisms are terminated by the gas maintained at the lethal temperature. *Id.*

Claims 18, 20 and 26 further provide that the heated gas and the dead organisms are extracted from the enclosure by an exhaust unit (44) and a filter (24). See, e.g., p. 9, ll. 19-22. Thus, not only are the undesirable organisms killed within the enclosed space, the residue of the destroyed organisms are removed from the enclosed space via the filter (24) (e.g., HEPA filter, etc.), thereby eliminating a source of allergen that can cause additional health problems to occupants of the space. See, e.g., p. 6, ll. 15-21 and p. 9, ll. 13-14.

Claim 20 further provides that a plurality of temperature-indicating devices (e.g., probes (32)) are disposed within the enclosed structure at various locations, such as onto the surface of a wall, floor or other space, or inserted through a structure into an interior space, e.g., within a wall cavity or crawl space. See, e.g., p. 8, ll. 16-22. The temperature-indicating devices are used to monitor the temperature within the enclosed space while the heated gas is being introduced to ensure that the enclosed structure is brought to the lethal temperature. *Id.*

Support for each of the limitations of Claim 18 can be found in the specification and drawings as indicated in Table 1 below:

<b>Claim 18 Limitations</b>	<b>Mapping to Specification and Drawings</b>
<i>providing at least one ingress duct communicating with said interior of said enclosure;</i>	See, e.g., page 3, lines 15-17; page 8, line 23 - page 9, line 1; Fig. 1 (20); and Fig. 2 (20).
<i>heating an environmentally acceptable gas to a temperature lethal to organisms comprising insects and at least one of fungi and bacteria;</i>	See, e.g., page 4, lines 11-18; page 6, lines 10-17; page 9, lines 8-10; and Fig. 2 (36).
<i>directing said heated gas into said enclosure through said at least one ingress duct for a time sufficient to raise the temperature of said enclosure to said lethal temperature to thereby kill said organisms;</i>	See, e.g., page 3, lines 19-20; page 6, lines 22-25; page 9, lines 8-10; page 10, lines 2-3; and Fig. 2 (38).
<i>applying a pressure differential to said enclosure relative to atmospheric pressure to draw said heated gas out of said enclosure;</i>	See, e.g., page 7, lines 6-13.
<i>filtering said heated gas to remove from said enclosure any fine particulate remains from said organisms that are suspended in the heated gas; and</i>	See, e.g., page 3, lines 21-23; page 7, lines 15-21; page 9, lines 13-14; Fig. 1 (24); and Fig. 2 (24).
<i>exhausting said filtered heated gas from said enclosure to an external environment such that the particulate remains are substantially removed from said heated gas before its exhaustion.</i>	See, e.g., page 4, lines 5-10; page 7, line 22 - page 8, line 1; page 9, lines 19-22; Fig. 1 (26); and Fig. 2 (44, 22).

**Table 1**

Similarly, support for each of the limitations of Claim 20 can be found in the specification and drawings as indicated in Table 2 below.

<b>Claim 20 Limitations</b>	<b>Mapping to Specification and Drawings</b>
<i>disposing at least one temperature-indicating device with said enclosed structure;</i>	See, e.g., page 3, lines 13-15; page 5, lines 20-21; page 8, lines 16-19; Fig. 1 (12); and Fig. 2 (32).
<i>heating a gas;</i>	See, e.g., page 6, lines 10-17; page 9, lines 8-10; and Fig. 2 (36).

<i>directing heated gas within said enclosed structure so as to maintain a flow of said heated gas within said enclosed structure;</i>	See, e.g., page 3, lines 19-20; page 6, lines 22-25; page 9, lines 8-10; page 10, lines 2-3; and Fig. 2 (38).
<i>monitoring the temperature within said enclosure using said at least one temperature-indicating device during at least a portion of said directing step, to determine when said enclosed structure reaches a sufficiently high temperature for sanitizing said enclosed structure;</i>	See, e.g., page 5, lines 2-4; page 5, line 20 - page 6, line 9; page 8, lines 16-22; page 9, line 23 - page 10, line 1; Fig. 1 (14); and Fig. 2 (14).
<i>filtering said heated gas to remove suspended particulates in the heated gas from said enclosed structure during at least a substantial portion of said directing step; and</i>	See, e.g., page 3, lines 21-23; page 7, lines 15-21; page 9, lines 13-14; Fig. 1 (24); and Fig. 2 (24).
<i>exhausting said heated gas from said enclosed structure by applying a vacuum to said enclosed structure so as to draw the suspended particulates out of said enclosed structure, wherein the suspended particulates are substantially removed from said heated gas before exhaustion from said enclosure.</i>	See, e.g., page 4, lines 5-10; page 7, line 22 - page 8, line 1; page 9, lines 19-22; Fig. 1 (26); and Fig. 2 (44, 22).

**Table 2**

Support for each of the limitations of Claim 26 can be found in the specification and drawings as indicated in Table 3 below:

<b>Claim 26 Limitations</b>	<b>Mapping to Specification and Drawings</b>
<i>heating a gas:</i>	See, e.g., page 6, lines 10-17; page 9, lines 8-10; and Fig. 2 (36).
<i>directing said heated gas in an interior portion of an enclosed structure so as to heat at least said interior portion to a temperature that is hot enough, when maintained for a period of time, to kill toxic organisms comprising at least one of fungi and bacteria;</i>	See, e.g., page 3, lines 19-20; page 6, lines 22-25; page 9, lines 8-10; page 10, lines 2-3; and Fig. 2 (38).

<i>maintaining an interior of said enclosed structure at not less than said temperature for not less than said period of time; and</i>	See, e.g., page 5, lines 2-4; page 6, lines 10-17; page 7, lines 2-13; page 8, lines 16-19; page 9, line 23 - page 10, line 5; and Fig. 2 (14).
<i>filtering said heated gas from said enclosed structure during at least a substantial portion of said maintaining step using a filter operable to capture suspended remains of said toxic organisms; and</i>	See, e.g., page 3, lines 21-23; page 7, lines 15-21; page 9, lines 13-14; Fig. 1 (24); and Fig. 2 (24).
<i>exhausting said heated gas from said enclosed structure by applying a vacuum to said enclosed structure so as to draw the suspended remains out of said enclosure, wherein the suspended particulates are substantially removed from said heated gas before exhaustion from said enclosure.</i>	See, e.g., page 4, lines 5-10; page 7, line 22 - page 8, line 1; page 9, lines 19-22; Fig. 1 (26); and Fig. 2 (44, 22).

**Table 3**

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REMARKS

In view of the amendments, Applicants respectfully submit that the Appeal Brief is now in compliance with 37 C.F.R. § 41.37. While the Applicants believes that no fees are due in connection with the filing of this paper, the Commissioner is authorized to charge any shortage in the fees, including extension of time fees, to Deposit Account No. 50-0639.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'B. Berliner', written over a horizontal line.

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Date: January 14, 2009

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